

C L A I M S

- 1.- A bidirectional hydraulic pump that comprises:
 - 5 - a hydraulic body comprising an inlet port receiving a water flow, a first outlet port and a second outlet port;
 - an impeller housed in the hydraulic body which causes the water flow to move in one direction or the other; and
 - 10 - a valve body that surrounds the impeller, the valve body comprising at least one orifice and said valve body being slidable on the internal surface of the hydraulic body in either one direction or the other, due to action of the water flow, between a first
15 position wherein the orifice is aligned with the first outlet port and a second position wherein the orifice is aligned with the second outlet port.

- 2.- A bidirectional hydraulic pump as claimed in claim 1,
20 wherein the valve body comprises on its inner surface at least one projection so that the water flow displaces the valve body.

- 3.- A bidirectional hydraulic pump as claimed in claim 2,
25 wherein said projections are ribs.

- 4.- A bidirectional hydraulic pump as claimed in claim 1, wherein the valve body is slidable on the internal surface of the hydraulic body by means of a sliding pin
30 and slot connection.

- 5.- A bidirectional hydraulic pump as claimed in claim 1, wherein the hydraulic body has a substantially cylindrical inner surface, the inlet port being coaxial

with the turning axis of the impeller, and the first and the second outlet ports being placed on the lateral peripheral surface of the hydraulic body, the valve body being a hollow cylindrical body that is coaxial with the
5 turning axis of the impeller, and the orifice being placed on the lateral peripheral surface of the valve body.